

Remarks

Preliminary Matters

Two claims were cancelled. None was added. The response is filed within the three month shortened statutory period. If the Office disagrees with any of these statements, and a fee is required as a result, the Office is authorized to communicate that news to the Applicant and debit Deposit Account No. 07-1077.

Declaration

The declaration as a part of the PCT Application Request form is not defective. This procedure of having the Inventor/Applicant (US) sign his declaration within the Request is completely acceptable within the Patent Cooperation Treaty and its Regulations. It is suggested that the Office Art Unit 1751 confirm this point with the PCT Help Desk or other parts of the PCT Operations within the Office.

Specification

The blank page 5 has been deleted by amendment on page 2 above.

The identification of publication locations which happen to be Internet addresses is NOT an embedded hyperlink or other form of browser-executable code. In the electronic copy of the PCT application, Applicants underscored the Internet address for *www.noveoncoatings.com* and did not for *www.elementis-specialties.com*. Neither collection of letters has an embedded hyperlink code associated with them¹. Further, these are as much a location of a source of publicly-available information as a book title. Therefore, Applicant traverses this objection.

Claim Rejections -- §112

Claims 6 and 15 have been cancelled.

Claim Rejections -- §102(b)

Claims 1-10 and 12-20 have been rejected as being anticipated by Geer et al.

¹ If, for some reason, the Office's electronic copy of this application has hyperlink code at these phrases, Applicant did not put them there because the PCT application was filed *on paper*.

(2002/0195592) or Silvis et al. (5,629,050²). Then, the Office proceeds to establish the basis for rejection using "Geer" and "Viswanathan". By using the Col. and Line identification of the paragraph concerning "Viswanathan", especially Col. 7, lines 14-15 and 25-28, Applicant believes that U.S. Pat. No. 6,972,098 (Viswanathan) was used to reject Claims 1-10 and 12-20.

Claims 1-4, 7-10, 12, 13, and 16-20 have been rejected as being anticipated by Claims 1-10 and 12-20 have been rejected as being anticipated by Geer et al. (2002/0195592) or Silvis et al. (5,629,050²). But only Silvis was used to explain the rejection, which would be consistent with the other novelty rejection using Geer.

Regardless of which of the three references was used, in fact, the reason for novelty of all pending claims is found over Geer, Viswanathan, and Silvis arises from the same phrase in Claim 1, as amended:

"a *non-ionic* waterborne urethane polymer".

The entire phrase must be considered for purposes of novelty, but in this invention, the point of novelty is the use of a *non-ionic* waterborne urethane polymer.

Applicant asserts that none of Geer, Viswanathan, or Silvis disclose or suggest a non-ionic waterborne polymer as the ingredient to be used with the inherently conductive polymer to make the claimed coating mixture.

It is true that Viswanathan, Geer, and Silvis also disclose waterborne polymers as useful for *their* inventions, but none of them discloses *non-ionic* waterborne urethane polymers. Therefore, Applicants claims, as amended, are novel over those three references.

Applicant demonstrates in Table 2 of his application the dramatic and unexpected superiority of a *non-ionic* waterborne urethane polymer as compared with an *ionic* waterborne urethane polymer. Applicant compared Permax 220 *non-ionic* waterborne urethane polymer³ with Bayhydrol 110 *ionic* waterborne urethane

² The Office Action stated "U.S. Pat. 2002/0195592" which seems to be a combination of a Patent and then the Geer et al. publication number. The Undersigned has assumed the Office has meant 5,629,050, which was cited by Applicant in his Information Disclosure Statement.

³ See also, Specification at Page 4, Line 4 et seq. reciting useful non-ionic waterborne polyurethanes from U.S. Patent Application Publication No. 20030195293, now U.S. Pat. No. 6,897,281 (Lubnin et al.), of record, as a source of preferred non-ionic waterborne polyurethane.

polymer. Time to coagulation was more than 90 days using Permax 220 non-ionic waterborne polymer, as compared with less than one day using Bayhydrol 110.

To clarify this point in reliance on the dramatic and unexpected results of Examples 1-5 compared with Comparative Example A, Applicant has amended Claims 1, 4, 9, 10, 13, and 18 to recite non-ionic waterborne *urethane* polymers.

Geer mentions "water-borne resin systems" at Paragraph [0011] and acrylic waterborne resins (RO3781 and RO5281 from Rustoleum) at Paragraphs [0152], [0153], and [0157]. But Geer does not disclose or suggest a waterborne *urethane* polymer, regardless of whether it is ionic or non-ionic⁴.

Viswanathan mentions polyurethanes and water-borne resins as noted by the Office. But Viswanathan is totally silent on the critical distinction, for this claimed invention, between ionic and *non-ionic* waterborne polyurethanes.

Likewise, Silvis mentions polyurethane thermoplastic and thermoset polymers but never discloses or suggests *non-ionic* waterborne urethane polymers.

The Office is invited to return to Table 2 for the proof of novelty in an invention which uses non-ionic waterborne urethane polymers. **Time to coagulation is at least 90 times better when using a non-ionic waterborne urethane polymer (Examples 1-5) than using an ionic waterborne urethane polymer (Comparative Example A).**

These dramatic and unexpected results also prove unobviousness of the claimed invention over any of Geer, Viswanathan, and Silvis, or a combination of them.

Further, Claims 4, 13, and 18 are also novel and unobvious over any of Geer, Viswanathan, and Silvis because the detailed nature of the non-ionic waterborne polyurethane is not disclosed or suggested by any of them.

Finally, novelty and unobviousness is found in Claims 7, 8, 16, 17, 19, and 20, because the addition of a non-ionic thickener (Claims 7, 16, and 19) or a non-ionic anti-settling agent (Claims 8, 17, and 20) results in a film which can be measured for surface conductivity. Please compare Example 1 with Examples 2-5 in Table 2.

⁴ Geer mentions Ebecryl 4883 aliphatic urethane diacrylate in connection with Example III at Paragraph [0132], but it is not a *waterborne* urethane polymer.

Conclusion

Claims 1-5, 7-10, 12-14, and 16-20 are patentable and entitled to a Notice of Allowance. If there are any remaining issues that block the issuance of a Notice of Allowance, the Office is invited to contact the undersigned.

Respectfully submitted by:

December 27, 2007
Date

John H. Hornickel
John H. Hornickel
Registration No. 29,393

PolyOne Corporation
33587 Walker Road
Avon Lake, Ohio 44012
Telephone: 440-930-3317
Fax: 440-930-1179
John.Hornickel@PolyOne.com